



University of Messina



1st Forum of Young Researchers in Energy & Environment

Thermal Energy Storage and Fuels Production

Webinar

November 12th, 2020

CET 3:30 PM

Link to the event:

<http://tiny.cc/fyree2020>

Keynote Speakers



Dr. Juan M. Coronado
Institute of Catalysis and Petrochemistry
Spanish National Research Council
(CSIC), Madrid, Spain



Prof. Sossina M. Haile
Materials Science and Engineering
Department
Northwestern University, IL, US

Organizers:

Dr. Emanuela Mastronardo

Prof. Candida Milone

1st FORUM OF YOUNG RESEARCHERS IN ENERGY AND ENVIROMENT (FYREE)

Thermal Energy Storage & Fuels Production

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WELCOME AND INTRODUCTION

Prof. Daniela BAGLIERI

Vice Rector for Research and Innovation, University of Messina, Messina, Italy

Prof. Candida MILONE

Head of the Engineering Department, University of Messina, Messina, Italy

3:50 PM
Session 1

THERMAL ENERGY STORAGE

Dr. Juan M. CORONADO

Senior Researcher

Institute of Catalysis and Petrochemistry, Spanish National Research Council (CSIC), Madrid, Spain

Keynote lecture: Current Challenges of Thermochemical Storage with Redox Oxides

4:05 PM

Dr. Emanuela MASTRONARDO

Marie Skłodowska-Curie Fellow

Institute of Catalysis and Petrochemistry, Spanish National Research Council (CSIC), Madrid, Spain

Materials Science and Engineering Department, Northwestern University, Evanston (IL), United States

Doped CaMnO₃ for Thermochemical Heat Storage from Concentrated Solar Power Plants (SESPer Project)

4:20 PM

Dr. Francesco ROVENSE

GOT Energy Talent – Marie Skłodowska-Curie COFUND Fellow

Chemical, Energy and Mechanical Technology Department, Rey Juan Carlos II University, Madrid, Spain

Concentrating Solar Power and Thermal Energy Storage, New Perspectives Towards Hybrid

Systems for Electric Generation

4:35 PM

Mr. Walter LOMBARDO

Ph.D. Student

Istituto di Tecnologie Avanzate per l'Energia "Nicola Giordano", CNR ITAE, Messina, Italy

Adsorption Cold Storage for Mobile Applications: Design and Preliminary Tests

4:50 PM

Mr. Juan Pablo RINCON DUARTE

Ph.D. Student

Institute of Solar Research of the German Aerospace Center, Cologne, Germany

Solar Rotary Kiln for Thermal Storage Applications

5:05 PM
Session 2

THERMOCHEMICAL FUELS PRODUCTION

Prof. Sossina M. HAILE

Walter P. Murphy Professor

Materials Science and Engineering Department, Northwestern University, Evanston (IL), United States

Keynote lecture: The Influence of Thermodynamics on the Kinetics of Hydrogen Production in Thermochemical Cycling

5:20 PM

Mr. Mario SÁNCHEZ

Ph.D. Student

IMDEA Energy Institute, Madrid, Spain

Effect of Temperature Gradients on Continuous Hydrogen Production

5:35 PM

Dr. Alfonso J. CARRILLO

Fundación LaCaixa Junior Leader Fellow

Institute of Chemical Technology, Spanish National Research Council (CSIC), Valencia, Spain

Functionalization of Redox Oxides with Exsolved Nanoparticles for the Production of Solar Fuels via Chemical Looping Reforming

5:50 PM

Dr. Johannes GROBBEL

Post-doctoral Researcher

Institute of Solar Research of the German Aerospace Center, Jülich, Germany

Operation Optimization of an Array of Receiver-Reactors for Solar Fuel Production

6:05 PM

Dr. Alicia BÁYON

Assistant Research Scientist

Arizona State University, Tempe (AZ), United States

Techno-economic Analysis of Thermochemical Energy Storage Systems Based on Solid-Gas Reactions

CLOSING REMARKS

6:20 PM

Dr. Emanuela MASTRONARDO

Prof. Candida MILONE